

46. *Perchloride of Iron as an Hæmostatic.*—A correspondent of the *Moniteur des Hôpitaux* (No. 24, 1856), states that one of the principal elements of his success in the difficult and dangerous operations M. Maissonneuve is famous for undertaking, is the remarkable use he makes of hæmostatics during their performance. He cites a recent case, occurring in a lad of sixteen, of fungous tumour of the dura mater, the growth of which, after having been temporarily arrested by ligature of the carotid, took on enormous proportions, and was accompanied by exhausting hemorrhages. M. Maissonneuve determined upon its removal, but the tumour bled on the slightest contact, and the patient would not be able to bear the slightest loss of blood. The line of incision extended from the anterior parts of the ear to the summit of the head, and descending along the nose, was carried backwards, and then upwards to the base of the jaw, and its point of departure. A great number of arteries were thus divided, five or six of which, by reason of their anastomotic enlargements, had acquired almost the size of the radial artery. Intelligent assistants immediately compressed them with the finger, but it was impossible to thus continue the dissection without exposing the patient to the danger of death from syncope. M. Maissonneuve therefore applied to each vessel a little plug of charpie soaked in perchloride of iron, which was allowed to attach itself to the wound. At every stroke of the bistoury or scissors he applied a new plug, so that during the operation the patient scarcely lost a spoonful of blood; and when the tumour had been entirely removed, the entire surface of the wound was found completely dried and tanned, and was at once dressed, without the necessity of the application of a single ligature. The brown eschar which covered the wound was detached about the 20th day, without giving rise to any hemorrhage; and although the cure can scarcely be expected to prove radical, the patient for the present is perfectly well.—*Ibid.*

47. *On the Influence of Phosphate of Lime in the Production of Callus.* By M. A. MILNE-EDWARDS.—The question of aiding the formation of callus by the administration of phosphate of lime has recently been revived in Paris, and the author of this paper alludes to some experiments tried by M. Gosselin at the Hôpital Cochin, especially in cases of fracture of the arm, which are sometimes so long in uniting. In the six cases observed by him the result seemed satisfactory, inasmuch as the apparatus could be removed in from twenty-seven to thirty days, the fracture appearing quite consolidated. As, however, in these cases, the condition of the callus could not be verified, M. Edwards undertook a series of comparative experiments on animals. Fractures as nearly as possible alike were executed upon dogs and rabbits of the same size and strength, to some only of which the lime was administered. The phosphate employed was prepared by the calcination of bones, and consequently was combined with carbonate. The results were decidedly favourable; and the author believes that the phosphate may be usefully employed as an adjuvant, expediting the union in ordinary fractures, and tending to prevent the non-consolidation of others.

From another communication,<sup>1</sup> it appears that in two of M. Gosselin's cases of fracture of the lower third of the humerus, complete consolidation occurred in thirty days. He administers as a minimum dose half a gramme per diem.—*Ibid.*, from *Comptes Rendus*, xlii.

#### OPHTHALMOLOGY.

48. *Difference between Coloration of the Lens, Incidental to Old Age, and Cataract.*—MR. HAYNES WALTON, in a paper read before the Harveian Society (June 5th, 1856).

Coloration of the lens, Mr. W. states, is not a disease, not a progressive affection, that destroys sight, but a slight natural change, incidental to age;

<sup>1</sup> Gazette des Hôpitaux, No. 150. 1855.

while cataract is a degeneration, a decay that progresses; and he gives the following interesting microscopical investigations of Mr. R. TAYLOR in confirmation of that view:—

"In olderly people, without an exception, so far as I have observed, the lens assumes an amber colour, more or less deep. The age at which this change commences varies exceedingly. I have seen it distinctly present at 30, and very strongly marked at 35, while, again, it has been but slight in a person of 60. Generally speaking, it will be found at the age of 40; I have never failed to find it at 45. It appears to be more easily developed in the coloured races, and in persons with any admixture of black blood; but my opportunities of observation on this point have been very limited. The colour pervades the whole of the lens, but is most intense in the nucleus, and fades off gradually in the cortical layers. When the 'coloration' is very intense, it impedes the transmission of light, so as to impair the sight, though the lense remains perfectly clear and free from opacity. Such persons are best in a bright light, and are frequently benefited by convex glasses, which concentrate the light. Notwithstanding the depth of colour, I have never heard any complaint of a yellow hue being thrown over objects, as is the case in looking through a piece of yellow glass, nor is there any difficulty in distinguishing different shades, even of blue and green. The colouring matter, which is said to be iron, is in solution. There are not any pigment cells or granules; which last, as it is said, are found in black cataracts. The coloration does not appear to interfere in any way with the healthy condition of the lens; in the oldest which I have examined, from a woman, 93 years of age, the lens tubes, both nuclear and cortical, were perfectly healthy; though they, as well as the superficial cells, were tinged of a bright amber colour. In cataract, on the contrary, the lens is disorganized; the superficial layers are softened and broken up, so as, in advanced cases, to be reduced almost to the condition of a pulp, which renders the drop of water, in which it is examined, turbid and milky. The opacity is due chiefly to a quantity of fine molecular matter, the result of the coagulation of the albuminous blastema of the lens, which is found partly aggregated in masses, and partly studding the exterior, perhaps also the interior of the tubes, as well as, in many instances, filling the large globular cells which lie immediately within the capsule. Occasionally, in cases of long duration, crystals of cholesteroline are found interspersed among the lenticular debris. The nucleus also undergoes a very remarkable change, becoming hard and dry to an extent very far from anything that is ever seen in the healthy lens of the oldest persons. The tubes are withered, atrophied, and brittle, and fall asunder and in fragments on the slightest touch of the dissecting needle. Their outlines are disfigured by deep, transverse, and longitudinal cracks and fissures, and by irregular nodules, probably of coagulated albumen, and in many instances they show a tendency to split into minute fibrillæ. It is evident, therefore, that on the recognition of these data, and the practical application of them, much error may be avoided, and the absence or existence of cataract rendered more certain, not to speak of the assistance that they offer in unravelling other ophthalmic disease; for lenticular 'coloration' has been described as an objective symptom of other affections, 'amaurosis' being one of these. It would answer no good purpose to toll of any of the many cases of 'coloration' and impaired vision, not due to opacity of the lens, that have been sent to me by surgeons for operation, under the supposition that cataract existed, nor of other mistakes connected with the subject that have come under my notice, such as the extraction of lenses, not cataractous, but merely coloured. I may say that mistakes are frequently made. In the case that I have detailed, it is easy to understand that had there been defective sight in the left eye, from disease at the posterior part of the eyeball, how readily it might have been supposed that cataract was present. It may be received as a rule, that, if a person can see to read the smallest type with or without glasses, and discern distant objects clearly, the pupil being undilated, no matter how clouded the lenses may appear, cataract does not exist. After this is understood, the only point on which there can be difficulty is to pronounce whether, in any given case of defective sight, cataract is present or absent; and the solution of which, so far as it can be told, depends

on the proper discrimination of physical appearances, the distinction between 'coloration' and lenticular degeneration, rather than on any subjective symptoms, although these may greatly assist. With undilated pupils it is difficult, if not often impossible, to recognize the difference. I have known surgeons of the first eminence in this metropolis err respecting it; hence the necessity, whenever doubt exists, for dilatation. Then, in the expanded pupil, the presence of striæ or opaque bundles of fibres, which so commonly exist in the early stage of cataract, at the circumference of the lens, can at once be detected. 'Coloration' is more central and browner, the light penetrates the lens, and the concentration of it is perceptible in the direction in which it falls. The opacity of cataract is more diffused and opaque, and reflects the light. In the first, vision is made worse by dilatation of the pupil, while in the other it is almost always improved, certainly always when the opacity is marked. Indeed, when the pupil is dilated, it is seldom that a correct conclusion cannot be arrived at. The exception is this: When the lenticular degeneration is yet slight, and has commenced in the centre, it may be impossible to detect it, that is, to be able to say with certainty that cataract is present, and the lapse of time only can decide. The late Mr. Dnlymple treated a gentleman for amaurosis. He had proscribed an arsenical preparation for some time without benefit. I was then consulted, and, after a long investigation, I decided that cataract was present, at least in one eye. This disease soon became palpable, and in time I operated on both eyes with the best success. There has never appeared the slightest amaurotic symptom. Can I afford a stronger proof that there may be uncertainty in the matter? When vision is much affected by loss of transparency in the lens, the opacity must be palpable; therefore, when this is not readily detected, any material loss of visual power must be attributed to some other cause, and this applies especially to defective vision in the very aged, in whom the 'coloration' is most marked, and when the eye, in obedience to the laws of mortality, which allows an exception, perhaps, only in the prostate gland, is not to get shrunken, and also becomes, so to speak, vitally impaired. Several times, under these circumstances, I have prevented the performance of a needless operation, and proved that a feeble retina was the defective cause. I have not found the ophthalmoscope of any service in this matter."—*Med. Times and Gaz.*, June 28, 1850.

49. *Statistics of Myopia*.—M. DEVOY states that of 3,295,202 young men examined in France for military service, during 19 years, from 1831 to 1849, 13,007 were exempted for myopia.—*Gazette Méd. de Paris*, May 17, 1856.

50. *Tincture of Iodine as a Collyrium in Hypopyon*.—M. RIVAUD-LAUBRAN recommends (*L'Union Médicale*, April 6) the tincture of iodine, four or five drops to six drachms of water as a collyrium to produce absorption in hypopyon.

#### MIDWIFERY.

51. *Triplet Birth*.—Dr. GEO. MONTGOMERY detailed to the Dublin Obstetrical Society (April 4, 1856) the following history of a triplet birth, which recently occurred in the Dublin Lying-in Hospital. One of the children was born alive, after having undergone the process commonly called "spontaneous evolution." All did well.

"As cases of *triple births* are of extreme infrequency, occurring in this country only once in about 5,000 deliveries, I have thought that the history of a case which happened recently in our hospital would not be uninteresting; more particularly as it was attended by some unusual circumstances, which I think of considerable practical importance.

"The subject of these observations is Jane Toolo, a delicate-looking woman,